



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,116	02/28/2005	Martin Vossiek	S1-02P13106	8531
24131 7590 01/11/2008 LERNER GREENBERG STEMER LLP P O BOX 2480 HOLLYWOOD, FL 33022-2480			EXAMINER BROWN, VERNAL U	
			ART UNIT 2612	PAPER NUMBER
			MAIL DATE 01/11/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,116	Applicant(s) VOSSIEK, MARTIN	
	Examiner Vernal U. Brown	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-20 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-20 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to communication filed on 10/09/07.

Response to Amendment

The examiner acknowledges the amendment of claims 12, 24, the cancellation of claims 21-22, and the addition of claim 25.

Response to Arguments

Applicant's arguments filed 10/09/2007 have been fully considered but they are not persuasive.

Applicant argues on page 8 that the reference of Ko et al fail to teach splitting an original alternating quantity into a first and second alternating quantity. It is the examiner's position that Ko et al. teaches a the original alternating quantity produce by the tire flexing the piezo element and produces an energy pulse used for powering the counter which is considered the first alternating quantity and a provides a pulse to be counted which is considered as the second alternating quantity (col. 8 lines 31-39).

Applicant argues on page 8 that the power circuit rectifies the alternating signal to produce a DC voltage, it is the examiner's position the DC voltage is derived from the alternating quantity of the energy pulse considered as the first alternating quantity (col. 8 lines 31-39).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 24 is rejected under 35 U.S.C. 102(b) as being anticipated by Carrender et al. US Patent 6745008.

Regarding claim 24, Carrender teaches a transponder converting ambient energy into energy for powering the transponder and the tag reflecting the received energy (col. 4 lines 22-27). Carrender teaches splitting the received signal into a first and second alternating quantity (first and second frequency) used for modulating the data stored in the tag (col. 4 lines 44-52). Carrender teaches the first and second alternating quantity is influence by a measured quantity of the frequency generated by the frequency generators (col. 5 lines 16-20).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12- 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinrich et al. US Patent 5606323 in view of Ko et al. US Patent 6438193.

Regarding claim 12 and 17-20, Heinrich et al. teaches a n antenna for producing an alternating quantity from the ambient energy produce by the interrogating signal and the alternating signal is rectified by the rectifier circuit for powering the transponder circuitry (col. 3

lines 48-52) but is silent on teaching the device is configured to measure a measured quantity and the ambient energy is converted into alternating quantity based on the measured quantity. Ko et al. in an art related invention teaches a transponder device configured to measure the number of revolution using counting circuit (col. 8 lines 1-5) and the converting of the ambient energy into alternating quantity is dependent on the measured quantity because the energy signal created is base on the revolution (col. 8 lines 31-37). Ko et al. also teaches a piezo electric element use to create an energy pulse (col. 8 lines 31-33) and therefore influence the measured quantity.

It would have been obvious to one of ordinary skill in the art to modify the system of Heinrich et al. as disclosed by Ko et al. because the device is configured to measure a measured quantity and the ambient energy is converted into alternating quantity based on the measured quantity allows a transponder device to perform measurement and derive its power from measured quantity.

Regarding claims 13 and 15, Heinrich et al. teaches an antenna (10) is use to backscatter the RF signal (electromagnetic signal) and is therefore considered a reflector (col. 3 lines 23-26).

Regarding claim 14, Heinrich et al. teaches reflecting high frequency signal (col. 3 lines 35-38).

Regarding claim 16, Heinrich et al. teaches the device is configured as a backscatter transponder (col. 3 lines 22- 32).

Regarding claim 23, Heinrich et al. teaches a n antenna for producing an alternating quantity from the ambient energy produce by the interrogating signal and the alternating signal is rectified by the rectifier circuit for powering the transponder circuitry (col. 3 lines 48-52) but is silent on teaching means for generating a second alternating quantity and the first and second

alternating quantity is derived from splitting an original alternating quantity into a first and second alternating quantity. Ko et al. in an art related invention teaches a piezo element producing an oscillation that is converted in to a first alternating quantity by power circuit (450) for power the device and a second alternating quantity in the form of a pulse for counting the revolution (col. 8 lines 31-39, col. 8 line 55-col. 9 line 15).

It would have been obvious to one of ordinary skill in the art to modify the system of Heinrich et al. as disclosed by Ko et al. because the damped oscillation produced by the piezo element is used to provide energy to the transponder and enables the measurement of a quantity such as the counting of the revolution of a tire.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carrender et al. US Patent 6745008 in view of Starkey US Patent 6417766.

Regarding claim 25, Carrender teaches a transponder converting ambient energy into energy for powering the transponder and the tag reflecting the received energy (col. 4 lines 22-27). Carrender teaches splitting the received signal into a first and second alternating quantity (first and second frequency) used for modulating the data stored in the tag (col. 4 lines 44-52). Carrender is silent on teaching a first filter for splitting the original alternating quantity into a first alternating quantity and second filter for splitting the original alternating quantity into a second alternating quantity. Starkey in an art related radio frequency device teaches obtaining a first and second alternating quantity from the original alternating quantity using a first and second filter (figure 6, col. 6 lines 6-25) in order to recover a signal at a desired frequency.

It would have been obvious to one of ordinary skill in the art to modify the system of Carrender et al. as disclosed by Starkey because a filter is conventional used to pass a desired frequency and block out unwanted frequencies.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U. Brown whose telephone number is 571-272-3060. The examiner can normally be reached on 8:30-7:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/526,116
Art Unit: 2612

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Vernal Brown
December 27, 2007



BRIAN ZIMMERMAN
SUPERVISORY PATENT EXAMINER